

Appl. No. 10/774,316
Attorney Docket No.: 2004009
Amdt. dated February 16, 2007
Reply to Office Action of November 16, 2006

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REMARKS

Reconsideration of the present application in view of the following remarks is respectfully requested. This Response replies to the Office Action dated November 16, 2006.

Claims 1-19 are currently pending. Upon entry of the foregoing amendments, claims 2, 5, 6, 7, 10, & 13 will be amended and new claims 20-37 will be added.

Allowable Subject Matter

Claims 18 and 19 have been allowed.

Per the Examiner's suggestion, claims 2 & 13 have been rewritten in independent form and are in condition for allowance. Claims depending from amended claims 2 & 13, claims 25-32 and 33-37 respectively, are also in condition for allowance.

37 C.F.R. §1.75(c)

Claims 5-7 are objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicants respectfully disagree that claims 5-7 fail to limit the subject matter of the previous claim 4 because, as dependent claims, they necessarily include all of the limitations contained in the claim from which they depend. However, in order to further prosecution, Applicants have amended claims 5-7 as suggested by the Office Action.

Applicants have amended claims 5, 6, and 7 to expressly identify the lower range value of 400 ppm as recited in claim 4 from which claims 5-7 depend. These amendments are not presented to distinguish a reference or directed to the patentability of the invention. Accordingly, amended claims 5-7 are entitled to a full range of equivalents.

Withdrawal of the objection and allowance of the claims is respectfully requested.

35 U.S.C. §112, second paragraph

Claim 10 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicants have amended claim 10 to remove any reference to the tradename IRGANOX, thereby obviating this rejection.

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This amendment is not presented to distinguish a reference or directed to the patentability of claim 10. Accordingly, amended claim 10 is entitled to a full range of equivalents.

Withdrawal of the objection and allowance of the claims is respectfully requested.

35 U.S.C. § 102(b)

Claims 1 and 3-7 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,013,622 to DeJuneas et al. ("DeJuneas"). Applicants traverse.

DeJuneas does not teach blow molding or blow molded articles, as recited in the pending claims. Moreover, DeJuneas does not teach perceiving parison cuffing defects or reducing cuffing defects, as recited in the pending claims.

Unlike the pending claims and much like the reference cited in the previous office action, DeJuneas does not teach blow molding processes. DeJuneas discloses a process for adding polyethylene glycol to low density polyethylene to reduce breakdown in a blown film formed from the low density polyethylene resin.

Blown films are not blow molded articles, and a blown film fabrication process is not a blow molding process. The two processes are different.

A blown film process is a continuous extrusion process that uses different equipment, different resins, and produces different products (i.e., non-rigid articles such as bags). A blown film process uses an extruder to push resin through a die where the resin is pulled vertically upward through a tower to nip rollers and wound on a cardboard stock.

On the other hand, blow molding is a non-continuous extrusion process that forms a parison (i.e., hollow tube of resin) that suspends vertically, below a die, by gravity until the parison is captured/grabbed by a mold. The parison is then expanded within the mold to produce a rigid article (i.e., milk jugs, motor oil bottles, etc.).

Furthermore, cuffing is not inherent to blow-molding processes as suggested by the Office Action. Cuffing is actually unusual. Cuffing can be caused, for example, by wear and tear, improper alignment, and/or misuse of one or more components (e.g., the match diameter of the head tooling, the pressure ring, etc.) on a machine that contributes to the wall thickness of an article. Consequently, cuffing is more prominent in older equipment. Cuffing can also be a

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result of high temperature which can reduce the melt strength of the polymer causing the polymer to stretch and become sticky. The temperature at which this occurs varies from machine to machine and from polymer to polymer.

Accordingly, claims 1 and 3-7 are not anticipated by DeJuneas. Withdrawal of the rejection and allowance of the claims is respectfully requested.

35 U.S.C. § 103(a)

Claims 8 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over DeJuneas. Applicants traverse.

As described above, DeJuneas does not teach or suggest blow molding or blow molded articles, as recited in the pending claims. Moreover, DeJuneas does not teach or suggest perceiving parison cuffing defects or reducing cuffing defects, as recited in the pending claims.

The Office Action has identified no motivation for modifying the blown films taught by the DeJuneas patent to achieve blow molded articles or methods that include the step of perceiving parison cuffing defects or reducing cuffing defects, as recited in the pending claims.

Withdrawal of the rejection and allowance of claims 8 and 9 is respectfully requested.

Claims 11-12 and 16-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over DeJuneas, in view of U.S. Patent No. 4,855,360 to Duchesne et al. ("Duchesne"). Applicants traverse this rejection because neither DeJuneas nor Duchesne alone or in combination teach or suggest the subject matter of claims 11-12 and 16-17.

The Office Action acknowledges that DeJuneas does not teach use of HDPE as a starting composition. See Office Action mailed 11/16/06, p.5. As described above, DeJuneas does not teach or suggest blow molding or blow molded articles, as recited in the pending claims. Moreover, DeJuneas does not teach or suggest perceiving parison cuffing defects or reducing cuffing defects, as recited in the pending claims.

Even assuming, *arguendo*, that one skilled in the art would be motivated to combine the teachings of DeJuneas and Duchesne, Duchesne does not remedy the deficiencies of DeJuneas. Like DeJuneas, Duchesne does not teach or suggest blow molding. In particular, Duchesne states, "This invention is useful in the extrusion of thermoplastic hydrocarbon polymers, which

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includes for example, extrusion of films, extrusion blow molding injection molding, pipe, wire or cable extrusion, and fiber production." *See*, Duchesne at col. 6, ll. 13-17. Injection blow molding is a process for making pharmaceutical type bottles and other containers having specific neck sizes, among others. Like blown films, injection blow molding processes use entirely different equipment and produce different products compared to blow molding processes. Duchesne makes no other mention or description of blow molding. In fact, one could conclude that the high density polymers disclosed in Duchesne are not suitable for blow molding since the reference includes no mention of blow molding. For example, Duchesne discloses a process "to reduce melt defects, i.e., those defects which sometimes appear in extruded thermoplastic hydrocarbon polymers such as sharkskin, continuous melt fracture and cyclic melt fracture." Such cosmetic defects are of no concern or relevance to blow molding processes.

Withdrawal of the rejection and allowance of claims 11-12 and 16-17 is respectfully requested.

Claims 14 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeJuneas and Duchesne, further in view of U.S. Patent No. 4,504,615 to Mills ("Mills"). Applicants respectfully traverse.

Claims 14 and 15 each include all the limitations of claim 11. Therefore, the foregoing argument concerning the combination of DeJuneas and Duchesne is equally applicable to this rejection.

Mills does not remedy the deficiencies of the DeJuneas and Duchesne patents. In fact, Mills makes no mention of any fabrication process. The teachings of Mills are not pertinent or applicable to blow molding. Therefore, even assuming *arguendo*, that one skilled in the art would be motivated to combine the teachings of DeJuneas, Duchesne, and Mills, a combination of DeJuneas, Duchesne, and Mills does not teach or suggest the claimed subject matter of claims 14 and 15.

Withdrawal of the rejection and allowance of claims 14 and 15 is respectfully requested.

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CONCLUSION


Applicants believe that the foregoing is a full and complete response to the Office Action of record. For the foregoing reasons, Applicants submit that the present claims meet all the requirements for patentability. Accordingly, an early and favorable reconsideration of the rejection, and allowance of pending claims 1-37 are requested.

The Commissioner is hereby authorized to charge counsel's Deposit Account No. 05-1712 (Docket #: 2003B041A), for any fees, including extension of time fees and excess claim fees, required to make this response timely and acceptable to the Office.

Respectfully submitted,

Date

2/16/07


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